



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

August 4, 2022

Nicole S. Higgs
Regulatory Manager
Valent Biosciences LLC
1910 Innovation Way, Suite 100
Libertyville, IL 60048

Subject: Pesticide Registration Improvement Act (PRIA) Labeling Amendment – To Remove the 6-Month Expiration Date based on 12-month Storage Stability Data
Product Name: Zorda WG Biological Fungicide
EPA Registration Number: 73049-522
EPA Receipt Date: 02/25/2022
Action Case Number: 00342403

Dear Ms. Higgs:

The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. “To distribute or sell” is defined under FIFRA section 2(gg) and its implementing regulation at 40 § CFR 152.3.

Should you wish to add/retain a reference to your company’s website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the U.S. Environmental Protection Agency (EPA). If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should EPA find or if it is brought to our attention that a website contains or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to EPA’s Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6.

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EPA Reg. No. 73049-522

Action Case No. 00342403

If you have any questions, please contact Hannah Dean via email at dean.hannah@epa.gov.

Sincerely,

A handwritten signature in cursive script that reads "Alexandra Boukedes".

Alexandra Boukedes, Risk Manager
Microbial Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511M)
Office of Pesticide Programs

Enclosure

[Text in brackets [] indicates optional language or language intended for explanatory purposes to facilitate label review. Thus, this language will often not appear on final printed labeling. Also, this page is present (page 1) to delineate sublabels and will not appear on the final printed labeling.]

**Zorda™ WG
BIOLOGICAL FUNGICIDE**

[Alternative brand names: Zorda™ Biological Fungicide / Bactericide and Zorda™ Turf and Ornamentals]

MASTER LABEL

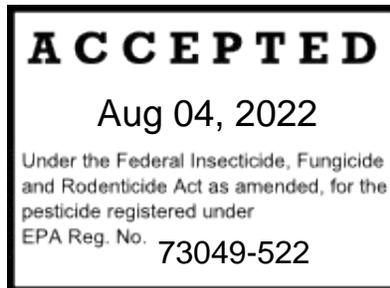
Zorda™ is a [broad-spectrum] biological fungicide [/] [bactericide] for the [control] [and] [/] [or] [suppression] of plant pathogenic microbes.

Sublabel I: Zorda™ WG Biological Fungicide - For Turf and Ornamental Uses

ACTIVE INGREDIENT:	By Wt.
<i>Bacillus amyloliquefaciens</i> strain PTA-4838*.....	74.81%
OTHER INGREDIENTS:	<u>25.19%</u>
TOTAL:	100.00%

*Contains a minimum of 1.65 x 10¹⁰ colony forming units per gram [CFU/g] of product.

**KEEP OUT OF REACH OF CHILDREN
CAUTION**



Zorda™ WG
BIOLOGICAL FUNGICIDE

[Alternative brand name: **Zorda™ Biological Fungicide / Bactericide**]

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TOTAL:	100.00%

*Contains a minimum of 1.65×10^{10} colony forming units per gram [CFU/g] of product.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See succeeding panel for First Aid, additional Precautionary Statements, Directions for Use and Storage/Disposal Statements

Net weight:

Lot No.:

EPA Reg. No.: 73049-522

EPA Est. No.: 33762-IA-01

Manufactured For:

Valent BioSciences LLC

1910 Innovation Way, Suite 100

Libertyville, IL 60048 USA

1-800-323-9597

FIRST AID	
If in Eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If Inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.
If on Skin or Clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
HOTLINE NUMBER	
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-315-9819 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-323-9597.</p>	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye irritation. Harmful if inhaled. Avoid contact with eyes or clothing. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Protective eyewear
- Waterproof gloves
- Shoes plus socks

Mixers/loaders and applicators must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any R or P filter; or a NIOSH-approved elastomeric particulate respirator with any R or P filter; or a NIOSH-approved powered air-purifying respirator with an HE filter. Repeated exposures to high concentrations of microbial proteins can cause allergic sensitization.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS:

When handlers use closed systems in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.607(d)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

USER SAFETY RECOMMENDATIONS

Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

For terrestrial uses: Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval of 12 hours.

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water) is:

- Coveralls
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Keep unprotected persons out of the treatment areas until sprays have dried.

PRODUCT INFORMATION

Zorda™ WG Biological Fungicide (hereafter referred to as Zorda) contains a minimum of 1.65×10^{10} Colony Forming Units (CFUs) of the bacterium *Bacillus amyloliquefaciens* strain PTA-4838. When applied according to the label directions, Zorda [controls] [or] [suppresses] a broad range of fungal [and bacterial] pathogens to provide protection from harmful diseases.

As a microbial product containing live spores of the protective bacterium *Bacillus amyloliquefaciens*, Zorda will produce the best results when applied preventively (before a disease outbreak occurs).

Zorda can be applied as a foliar spray, either standalone or in combination with other registered products in a rotation or as tank mixes. For improved performance, use as part of a spray program in rotation with other registered fungicides [and bactericides] with unrelated modes of action.

Incorporation of adjuvants, in particular spreader-stickers, to ensure improved coverage can further enhance disease control. All types of spray equipment commonly utilized for the application of foliar sprays can be used to apply Zorda.

Many factors, including disease pressure, the environment (weather) and the condition of the crop can impact the level of control. Adjust spray intervals and use rate accordingly, with higher rates and more frequent applications if high disease pressure is expected.

Re-application may be required in case of heavy rain events shortly after a treatment. Product should be used as soon as possible after opening the package.

FOLIAR APPLICATION DIRECTIONS

Always read and follow the label instructions regarding application rates and restrictions. For best disease control performance, apply Zorda preventively (before or during the initial stages of disease). [Apply the higher labeled rates when increased pest pressure is expected based on predicted weather conditions or other factors].

Application equipment must be clean and free of previous pesticide deposits before applying Zorda. Determine the required amount of product based on desired application rate and acreage to be treated. Fill tank with water to at least half the final volume. Add product(s) in mix order referenced in MIXING ORDER FOR TANK-MIX PARTNERS BY FORMULATION TYPE section (see below) to the spray tank and mix if necessary, for complete dissolution. Add remaining water to reach the desired spray volume (10 – 100 gallons of prepared spray solution per acre). If prepared spray solution is stored for extended periods of time, agitate before use.

Always use spray volumes high enough to ensure thorough coverage of all treated plant surfaces. Complete coverage is crucial for efficient disease control or suppression.

GREENHOUSE APPLICATION DIRECTIONS

Zorda can be used as a foliar spray in the greenhouse. Please refer to the “Foliar Applications Directions” above for more information. As crop safety has not been confirmed on all cultivars, plant compatibility testing is recommended when spraying on a cultivar in the greenhouse for the first time.

COMPATIBILITY WITH OTHER AGRICULTURAL PRODUCTS

Do not tank mix Zorda with other products unless compatibility has been verified. If considering tank mixing Zorda with other products, use the following compatibility jar test before mixing an entire tank: Add water from the same water source to a clear glass or plastic jar. Add the products in correct proportions. Mix thoroughly and let stand for a minimum of 15 minutes. Separation, gelling, or generation of heat are all signs of incompatibility.

Consult with your Valent Agricultural Specialist for potential pesticide interactions.

Always read and follow all label directions and precautions for each product. When using combinations of products, the most restrictive label limitations and precautions must be followed. Do not mix Zorda with any product that has a prohibition against tank mixing. For further information, consult your Valent Agricultural Specialist.

MIXING ORDER FOR TANK-MIX PARTNERS BY FORMULATION TYPE

- 1) Carrier (water)
- 2) Wettable granules (dry flowables)
- 3) Wettable powders
- 4) Aqueous solutions
- 5) Emulsifiable concentrates
- 6) Adjuvants

CROP APPLICATION DIRECTIONS

AGRICULTURAL/ COMMERCIAL USES:

Root and Tuber Vegetables
Arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; beet, garden; beet, sugar; burdock, edible;

canna, edible; carrot; cassava, bitter and sweet; celeriac (celery root); chayote (root); chervil, turnip-rooted; chicory; chufa; dasheen (taro); ginger; ginseng; horseradish; leren; parsley, turnip-rooted; parsnip; potato; radish; radish, oriental (daikon); rutabaga; salsify (oyster plant); salsify, black; salsify, Spanish; skirret; sweet potato; tanier (cocoyam); turmeric; turnip; yam bean; yam, true; including cultivars, varieties and/or hybrids of these commodities

Pests		Application Rate
Aerial stem rot	<i>Erwinia carotovora</i> / <i>Pectobacterium carotovora</i> [*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Alternaria Leaf Blight / Black Rot / Black Crown Rot	<i>Alternaria</i> spp.[*]	
Bacterial Leaf Spot / Bacterial Leaf Blight	<i>Xanthomonas</i> spp.[*]	
Black Dot	<i>Colletotrichum</i> spp.[*]	
Brown Leaf Spot	<i>Alternaria alternata</i> [*]	
Downy Mildew	<i>Peronospora</i> spp.[*]; <i>Plasmopara</i> spp.[*]	
Early Blight	<i>Alternaria solani</i> [*]	
Gray Mold	<i>Botrytis</i> spp.[*]	
Late Blight	<i>Phytophthora infestans</i> [*]	
Leaf Spot	<i>Cercospora</i> spp.[*]	
Powdery Mildew	<i>Erysiphe</i> spp.[*]	
Ramularia	<i>Ramularia</i> spp.[*]	
Rhizoctonia Stem Canker and Crown Rot	<i>Rhizoctonia solani</i> [*]	
Rust	<i>Uromyces</i> spp.[*]	
White Mold	<i>Sclerotinia sclerotiorum</i> [*]	

*Not for use in CA

Bulb Vegetables		
Chive (fresh leaves, Chinese, fresh leaves); daylily, bulb; elegans hosta; fritillaria (bulb, leaves); garlic (bulb, great-headed bulb and serpent bulb); kurrat; lady’s leek; leek; wild leek; lily, bulb; onion (Beltsville bunching, bulb, Chinese, bulb, fresh, green, macrostem, pearl, potato bulb, tree, tops and Welsh tops); shallot (bulb and fresh leaves); including cultivars, varieties and/or hybrids of these commodities		
Pests		Application Rate
Bacterial Leaf Streak	<i>Pseudomonas</i> spp.[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Botrytis Neck Rot	<i>Botrytis</i> spp. [*]	
Botrytis Leaf Blight	<i>Botrytis squamosa</i> [*]	
Downy Mildew	<i>Peronospora</i> spp.[*]	
Onion Purple Blotch	<i>Alternaria porri</i> [*]	
Powdery Mildew	<i>Erysiphe</i> spp.[*]; <i>Leveillula taurica</i> [*]	
Rust	<i>Puccinia porri</i> [*]	

Stemphylium Leaf Blight / Stalk Rot	<i>Stemphylium vesicarium</i> [*]	
White Rot	<i>Sclerotium cepivorum</i> [*]	
Xanthomonas Leaf Blight	<i>Xanthomonas</i> spp.[*]	

*Not for use in CA

Leafy Vegetables		
<p>Amaranth (Chinese and leafy); arugula; aster, Indian; blackjack; broccoli (Chinese and raab) cabbage (abyssinian, Chinese bok choy and seakale); cat's whiskers; cham-chwi; cham-na-mul; chervil, fresh leaves; chipilin; chrysanthemum, garland; cilantro, fresh leaves; collards; corn salad; cosmos; cress (garden and upland); dandelion, leaves; dang-gwi, leaves; dillweed; dock; dol-nam-mul; ebolo; endive; escarole; fameflower; feather cockscomb; good king henry; hanover salad; huauzontle; jute, leaves; kale; lettuce (bitter, head and leaf); maca, leaves; mizuna; mustard greens; orach; parsley, fresh leaves; plantain, buckhorn; primrose, English; purslane (garden and winter); radicchio; radish, leaves; rape greens; rocket, wild; shepherd's purse; spinach (Malabar, New Zealand and tanier); Swiss chard; turnip greens; violet, Chinese, leaves; watercress**; including cultivars, varieties and/or hybrids of these commodities</p>		
Pest	Application Rate	
Anthracnose	<i>Colletotrichum</i> spp.[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Alternaria Leaf Spot	<i>Alternaria brassicicola</i> [*]	
Bacterial Blight / Bacterial Leaf Spot	<i>Xanthomonas</i> spp.[*]; <i>Pseudomonas syringae</i> [*]	
Botrytis	<i>Botrytis</i> spp.[*]	
Bottom Rot	<i>Rhizoctonia solani</i> [*]	
Downy Mildew	<i>Bremia lactucae</i> [*]; <i>Peronospora</i> spp.[*]	
Leaf Spot	<i>Cercospora</i> spp.[*]	
Powdery Mildew	<i>Leveillula taurica</i> [*]	
Pink Rot	<i>Sclerotinia sclerotiorum</i> [*]	
Sclerotinia Head and Leaf Drop	<i>Sclerotinia</i> spp.[*]	
White Rust	<i>Albugo occidentalis</i> [*]	

*Not for use in CA

** Do not apply to flooded fields

Brassica (Cole) Leafy Vegetables
<p>Broccoli; broccoli, Chinese (gai lon); broccoli raab (rapini); Brussels sprouts; cabbage; cabbage, Chinese (bok choy); cabbage, Chinese (napa); cabbage, Chinese mustard (gai choy); cauliflower; cavalo broccolo; collards; kale; kohlrabi; mizuna; mustard greens; mustard spinach; rape greens; including cultivars,</p>

varieties and/or hybrids of these commodities		
Pest		Application Rate
Alternaria Leaf Spot	<i>Alternaria</i> spp.[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Anthracnose	<i>Colletotrichum</i> spp.[*]	
Bacterial Leaf Spot and Blight	<i>Pseudomonas</i> spp.[*]	
Bacterial Rot	<i>Erwinia</i> spp.[*]	
Black Rot	<i>Xanthomonas campestris</i> [*]	
Gray Mold	<i>Botrytis</i> spp.[*]	
Cercospora Leaf Spot	<i>Cercospora brassiciola</i> [*]	
Downy Mildew	<i>Peronospora</i> spp.[*]	
Pin Rot	<i>Alternaria</i> spp.[*]	
Powdery Mildew	<i>Erysiphe polygoni</i> [*]	
Southern Blight	<i>Sclerotium rolfsii</i> [*]	
White Rust	<i>Albugo candida</i> [*]	
Xanthomonas Leaf Spot	<i>Xanthomonas campestris</i> [*]	

*Not for use in CA

Legume Vegetables (Succulent or Dried)		
<p>Bean (<i>Lupinus</i> spp.) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin); bean (<i>Phaseolus</i> spp.) (includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean); bean (<i>Vigna</i> spp.) (includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean); broad bean (fava bean); chickpea (garbanzo bean); guar; jackbean; lablab bean (hyacinth bean); lentil; pea (<i>Pisum</i> spp.) (includes dwarf pea, edible-podded pea, English pea, field pea, garden pea, green pea, snowpea, sugar snap pea); pigeon pea; soybean; soybean (immature seed); sword bean; including cultivars, varieties and/or hybrids of these commodities</p>		
Pests		Application Rate
Asian Soybean Rust	<i>Phakopsora pachyrhizi</i> [*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Bacterial Brown Spot	<i>Pseudomonas syringae</i> pv. <i>syringae</i> [*]	
Bacterial Pustule / Bacterial Blight	<i>Xanthomonas</i> spp.[*]	
Brown Spot	<i>Septoria glycines</i> [*]	
Downy Mildew	<i>Peronospora manshurica</i> [*];	

	<i>Phytophthora nicotianae</i> [*]	
Gray Mold	<i>Botrytis</i> spp.[*]	
Halo Blight	<i>Pseudomonas savastanoi</i> / <i>Pseudomonas syringae</i> pv. <i>phaseolicola</i>	
Leaf Spot	<i>Cercospora</i> spp.[*]	
Powdery Mildew	<i>Erysiphe</i> spp.[*]	
Rust	<i>Uromyces appendiculatus</i> [*]; <i>Puccinia</i> spp.[*]	
White Mold	<i>Sclerotinia sclerotiorum</i> [*]	

*Not for use in CA

Fruiting Vegetables		
African eggplant; bush tomato; cocona; currant tomato; eggplant; garden huckleberry; goji berry; groundcherry; martynia; naranjilla; okra; pea eggplant; pepino; pepper (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper); roselle; scarlet eggplant; sunberry; tomatillo; tomato; tree tomato; including cultivars, varieties and/or hybrids of these commodities		
Pest	Application Rate	
Anthracnose	<i>Colletotrichum</i> spp.[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Bacterial Canker	<i>Clavibacter michiganensis</i> [*]	
Bacterial Speck	<i>Pseudomonas syringae</i> pv. <i>tomato</i> [*]	
Bacterial Spot / Blight	<i>Xanthomonas</i> spp.[*]	
Buckeye Rot	<i>Phytophthora</i> spp.[*]	
Early Blight	<i>Alternaria solani</i> [*]	
Gray Mold	<i>Botrytis cinerea</i> [*]	
Late Blight	<i>Phytophthora infestans</i> [*]	
Leaf Mold	<i>Fulvia fulva</i> / <i>Passalora fulva</i> [*]	
Phytophthora Blight	<i>Phytophthora capsici</i> [*]	
Powdery Mildew	<i>Leveillula taurica</i> [*]	
Southern Blight	<i>Sclerotium rolfsii</i> [*]	
Target Spot	<i>Corynespora cassicola</i> [*]	
White Mold	<i>Sclerotinia sclerotiorum</i> [*]	

*Not for use in CA

Cucurbit Vegetables

Chayote (fruit); Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); *Momordica* spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon (includes cantaloupe); pumpkin; squash (summer and winter (includes butternut squash, calabaza, hubbard, acorn, spaghetti)); watermelon; including cultivars, varieties and/or hybrids of these commodities

Pests		Application Rate
Alternaria Leaf Spot	<i>Alternaria</i> spp.[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Angular Leaf Spot	<i>Pseudomonas syringae</i> [*]	
Anthracoese	<i>Colletotrichum lagenarium</i> [*]	
Bacterial Fruit Blotch	<i>Acidovorax avenae</i> [*]	
Cercospora Leaf Spot	<i>Cercospora citrullina</i> [*]	
Downy Mildew	<i>Pseudoperonospora cubensis</i> [*]	
Gray Mold	<i>Botrytis cinerea</i> [*]	
Gummy Stem Blight	<i>Didymella bryoniae</i> [*]	
Phytophthora Blight	<i>Phytophthora capsici</i> [*]	
Plectosporium Blight	<i>Plectosporium tabacinum</i> / <i>Plectosphaerella cucumerina</i> [*]	
Powdery Mildew	<i>Erysiphe</i> spp.[*]; <i>Sphaerotheca</i> spp.[*]	
Southern Blight	<i>Sclerotium rolfsi</i> [*]	

*Not for use in CA

Citrus Fruit

Calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime (Australian desert, Australian finger, Australian round, Brown River finger, mount white, New Guinea wild, Russell River, sweet, and Tahiti lime); Mediterranean mandarin; orange, (sour and sweet); pummelo; satsuma mandarin; tachibana orange; Tahiti lime; tangelo; tangerine (mandarin); tangor; trifoliate orange; uniq fruit; including cultivars, varieties and/or hybrids of these commodities

Pests		Application Rate
Alternaria brown Spot	<i>Alternaria alternata</i> [*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Anthracoese	<i>Colletotrichum gloeosporioides</i> [*]	
Bacterial Blast	<i>Pseudomonas syringae</i> [*]	
Black Spot	<i>Guignardia citricarpa</i> / <i>Phyllosticta citricarpa</i> [*]	
Citrus Canker	<i>Xanthomonas</i> spp.[*]	

Greasy Spot	<i>Mycosphaerella citri</i> [*]	
Melanose	<i>Diaporthe citri</i> [*]	
Post Bloom Fruit Drop	<i>Colletotrichum acutatum</i> [*]	
Powdery Mildew	<i>Oidium citri</i> [*]; <i>Fibroidium tingitaninum</i> / <i>Acrosporium tingitaninum</i> [*]	
Citrus Scab	<i>Elsinoe fawcetti</i> [*]	

*Not for use in CA

Pome Fruit		
Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; including cultivars, varieties and/or hybrids of these commodities		
Pests	Application Rate	
Alternaria blotch	<i>Alternaria mali</i> [*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Apple Scab	<i>Venturia</i> spp.[*]	
Bitter Rot	<i>Colletotrichum</i> spp.[*]	
Black Rot / Frogeye Leaf Spot	<i>Botryosphaeria obtuse</i> [*]	
Brooks spot	<i>Mycosphaerella pomi</i> [*]	
Bull’s-Eye Rot	<i>Neofabraea</i> spp.[*]	
Cedar-Apple Rust	<i>Gymnosporangium juniperi-virginianae</i> [*]	
Fire Blight	<i>Erwinia amylovora</i> [*]	
Flyspeck	<i>Schizothyrium pomi</i> [*]	
Gray Mold	<i>Botrytis</i> spp.[*]	
Powdery Mildew	<i>Podosphaera leucotricha</i> [*]	
Sooty Blotch	<i>Sooty Blotch Disease complex</i> [*]	
White Rot	<i>Botryosphaeria dothidea</i> [*]	

*Not for use in CA

Stone Fruit	
Apricot; apricot, Japanese; capulin; cherry (black, Nanking, sweet and tart); Jujube, Chinese; nectarine; peach; plum (American, beach, Canada, cherry, Chickasaw, Damson, Japanese, Klamath and prune); plumcot; sloe; including cultivars, varieties and/or hybrids of these commodities	
Pests	Application Rate

Alternaria Spot / Fruit Rot	<i>Alternaria alternata</i> [*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lb per acre
Anthracnose	<i>Colletotrichum</i> spp.[*]	
Bacterial Canker	<i>Pseudomonas</i> spp.[*]	
Bacterial Spot / Bacterial Leaf Spot	<i>Xanthomonas</i> spp.[*]	
Brown Rot Blossom Blight and fruit rot	<i>Monilinia</i> spp[*]	
Cherry Leaf Spot	<i>Blumeriella jaapii</i> [*]	
Fruit Brown Rot	<i>Monilinia fruticola</i> [*]	
Gray Mold	<i>Botrytis</i> spp.[*]	
Leaf Curl	<i>Taphrina deformans</i> [*]	
Powdery Mildew	<i>Sphaerotheca pannosa</i> [*]; <i>Podosphaera</i> spp.[*]	
Rusty Spot	<i>Podosphaera leucotricha</i> [*]	
Scab	<i>Cladosporium carpophilum</i> [*]	
Shot Hole	<i>Wilsonomyces carpophilus</i> [*]; <i>Xanthomonas pruni</i> [*]	

*Not for use in CA

Berry and Small Fruit		
<p>Amur river grape; aronia berry; bayberry; bearberry; bilberry; blackberry (including Andean blackberry, arctic blackberry, bingleberry, black satin berry, boysenberry, brombeere, California blackberry, Chesterberry, Cherokee blackberry, Cheyenne blackberry, common blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, evergreen blackberry, Himalayaberry, hullberry, lavacaberry, loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, mora, mures deronce, nectarberry, Northern dewberry, olallieberry, Orgeon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, Southern dewberry, tayberry, youngberry, zarzamora, and cultivars, varieties and/or hybrids of these); blueberry (highbush and lowbush); buffalo currant; buffalobery; che; Chilean guava; chokecherry; cloudberry; cranberry** (including highbush); currant (black and red); elderberry; European barberry; gooseberry; grape; honeysuckle, edible; huckleberry; jostaberry; Juneberry (Saskatoon berry); kiwifruit (fuzzy and hardy); lingonberry; maypop; mountain pepper berries; mulberry; muntries; native currant; partridgeberry; phalsa; pincherry; raspberry (black and red); riberry; salal; schisandra berry; sea buckthorn; serviceberry; strawberry; wild raspberry; including cultivars, varieties and/or hybrids of these commodities</p>		
Pests		Application Rate
Alternaria Fruit Rot	<i>Alternaria tenuissima</i> [*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Angular Leaf Spot	<i>Xanthomonas fragariae</i> [*]	
Anthracnose	<i>Colletotrichum gloeosporioides</i> [*];	

	<i>Colletotrichum acutatum</i> [*]
Bacterial Canker	<i>Pseudomonas</i> spp.[*]
Botrytis Blight / Gray Mold	<i>Botrytis</i> spp.[*]
Botryosphaeria Dieback; Macrophoma Rot	<i>Botryosphaeria</i> spp.[*]; <i>Diplodia</i> spp.[*]; <i>Lasiodiplodia</i> spp.[*]; <i>Neofusicoccum</i> spp.[*]; <i>Dothiorella</i> spp.[*]; <i>Sphaeropsis</i> spp.[*]
Black Rot	<i>Guignardia bidwelii</i> [*]
Common Leaf Spot	<i>Ramularia tulasneii</i> [*]
Downy Mildew	<i>Plasmopara viticola</i> [*]
Esca Black Measles	<i>Phaeoacremonium</i> spp.[*]; <i>Phaeomoniella</i> spp.[*]
Eutypa	<i>Eutypa lata</i> [*]
Gray Mold	<i>Botrytis</i> spp.[*]
Leaf Rust	<i>Pucciniastrum vacciniae</i> [*]
Leaf Scorch	<i>Diplocarpum earliana</i> [*]
Leaf Spot	<i>Mycosphaerella fragariae</i> [*]
Mummy Berry	<i>Monilinia vaccinii-corymbosi</i> [*]
Phomopsis	<i>Phomopsis</i> spp.[*]
Powdery Mildew	<i>Unicula / Erysiphe necator</i> [*]; <i>Microsphaera alni</i> [*]; <i>Sphaerotheca macularis</i> [*]
Sclerotinia	<i>Sclerotinia sclerotiorum</i> [*]
Sooty Mold	Pathogens belonging to the Order <i>Dothiideales</i> [*]
Sour Rot	Sour rot complex[*]
Summer Bunch Rot	<i>Aspergillus</i> spp.[*]; <i>Alternaria</i> spp.[*]; <i>Cladosporium</i> spp.[*]; <i>Penicillium</i> spp.[*]; <i>Rhizopus</i> spp.[*]

*Not for use in CA

** Do not apply to flooded fields

Tree Nuts

African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; Okari nut; Pachira nut; peach palm nut; pecan; pequi; Pili nut; pine nut; pistachio; Sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; including cultivars, varieties and/or hybrids of these commodities	
Pests	Application Rate
Alternaria Leaf Spot	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Anthraco	
Bacterial Canker	
Bacterial Spot	
Blossom and Shoot Blight	
Botryosphaeria Blight	
Brown Rot	
Hull Rot	
Jacket Rot / Green Fruit Rot	
Pecan Scab	
Powdery Mildew	
Rust	
Rusty Spot	
Scab	
Shot Hole	
Walnut Blight	

*Not for use in CA

Cereal Grains (Including Forage, Fodder or Straw from Cereal Grains)	
Barley; buckwheat; corn; millet, pearl; millet, proso; oats; popcorn; rice**; rye; sorghum (milo); teosinte; triticale; wheat; wild rice**; including cultivars, varieties and/or hybrids of these commodities	
Pests	Application Rate
Bacterial Blight and Streak	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre

Blast	<i>Magnaporthe grisea</i> / <i>Pyricularia oryzae</i> [*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Brown Rot, Leaf Spots	<i>Cercospora</i> spp.[*]	
Brown Rust	<i>Puccinia hordei</i> [*]	
Common Rust	<i>Puccinia sorghi</i> [*]	
Crown Rust	<i>Puccinia coronate</i> [*]	
Head Scab	<i>Fusarium</i> spp.[*]	
Leaf Rust	<i>Puccinia triticina</i> [*]	
Northern Leaf Blight	<i>Setosphaeria turcica</i> / <i>Exserohilum turcicum</i> [*]	
Powdery Mildew	<i>Erysiphe graminis</i> [*]	
Sheath Spot	<i>Rhizoctonia oryzae</i> [*]	
Sheath Blight	<i>Rhizoctonia solani</i> [*]	
Smut	<i>Tilletia barclayena</i> [*]	
Southern Leaf Blight	<i>Bipolaris maydis</i> [*]; <i>Cochliobolus hererostraphus</i> [*]	
Southern Rust	<i>Puccinia polysora</i> [*]	
Stem Rot	<i>Sclerotium oryzae</i> [*]	
Stem Rust	<i>Puccinia graminis</i> [*]	
Stripe Rust	<i>Puccinia striiformis</i> [*]	
Tan Spot	<i>Pyrenophora tritici-repentis</i> [*]	

*Not for use in CA

** Do not apply to flooded fields

Non-Grass Animal Feed		
Alfalfa; bean, velvet; clover (<i>Trifolium</i> spp., <i>Melilotus</i> spp.); kudzu; lespedeza; lupin; sainfoin; trefoil; vetch; vetch, crown; vetch, milk; including cultivars, varieties and/or hybrids of these commodities		
Pests		Application Rate
Bacterial Wilt	<i>Clavibacter michiganense</i> [*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Powdery mildew	<i>Erysiphe</i> spp.[*]	
Spring Black Stem	<i>Phoma medicaginis</i> / <i>Ascochyta medicaginicola</i> [*]	
White mold	<i>Sclerotinia sclerotiorum</i> [*]	

*Not for use in CA

Herbs and Spices
Allspice; angelica; anise (seed); anise, star; annatto (seed); balm (lemon balm); basil; borage; burnet;

camomile; caper buds; caraway; caraway, black; cardamom; cassia (bark and buds); catnip; celery seed; chervil (dried); chive; chive, Chinese; cinnamon; clary; clove buds; coriander leaf (cilantro or Chinese parsley); coriander seed (cilantro); costmary; culantro (leaf); culantro (seed); cumin; curry (leaf); dill (dillweed); dill (seed); fennel (common); fennel, Florence (seed); fenugreek; grains of paradise; horehound; hyssop; juniper berry; lavender; lemongrass; lovage (leaf); lovage (seed); mace; marigold; marjoram (includes sweet or annual marjoram, wild marjoram or oregano, and pot marjoram); mint; mustard (seed); nasturtium; nutmeg; parsley (dried); pennyroyal; pepper, black; pepper, white; poppy (seed); rosemary; rue; saffron; sage; savory, summer and winter; sweet bay; tansy; tarragon; thyme; vanilla; wintergreen; woodruff; wormwood; including cultivars, varieties and/or hybrids of these commodities

Pests		Application Rate
Alternaria Leaf Blight	<i>Alternaria</i> spp.[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Anthraxnose	<i>Colletotrichum</i> spp.[*]	
Bacterial Diseases	<i>Erwinia</i> spp.[*]; <i>Xanthomonas</i> spp.[*]; <i>Pseudomonas</i> spp.[*]	
Botrytis	<i>Botrytis</i> spp.[*]	
Downy Mildew	<i>Peronospora</i> spp.[*]	
Powdery Mildew	<i>Erysiphe</i> spp.[*]	
Sclerotinia	<i>Sclerotinia</i> spp.[*]	
Leaf Spot	<i>Cercospora</i> spp.[*]	
Rusts[*]	<i>Puccinia</i> spp. and others[*]	

*Not for use in CA

Oilseeds

Borage; calendula; castor oil plant; Chinese tallowtree; cottonseed; crambe; cuphea; echium; euphorbia; evening primrose; flax seed; gold of pleasure; hare's ear mustard; jojoba; lesquerella; lunaria; meadowfoam; milkweed; mustard seed; niger seed; oil radish; poppy seed; rapeseed; rose hip; safflower; sesame; stokes aster; sunflower; sweet rocket; tallowwood; tea oil plant; vernonia; including cultivars, varieties and/or hybrids of these commodities

Pests		Application Rate
Alternaria Leaf Spot	<i>Alternaria</i> spp.[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Bacterial Pustule, Bacterial Blight	<i>Xanthomonas</i> spp.[*]	
Bacterial Speck	<i>Pseudomonas</i> spp.[*]	
Downy Mildew	<i>Peronospora</i> spp.[*]; <i>Plasmopara halstedii</i> [*]	
Leaf Spot	<i>Corynespora</i> <i>cassiicola</i> [*]	
Powdery Mildew	<i>Oidium lini</i> [*]	
Pod and Stem Blight	<i>Diaporthe</i> <i>phaseolorum</i> [*]; <i>Phomopsis longicolla</i> [*]	

Rust	<i>Albugo</i> spp.[*]; <i>Puccinia</i> spp.[*]; <i>Melampsora lini</i> [*]	
White Mold	<i>Sclerotinia sclerotiorum</i> [*]	

*Not for use in CA

Stalk, Stem and Leaf Petiole Vegetables		
<p>Agave; aloe vera; asparagus; bamboo, shoots; cardoon; celery; celery, Chinese; celtuce; fennel, Florence, fresh leaves and stalk; fern, edible, fiddlehead; fuki; artichoke, globe; kale, sea; kohlrabi; palm hearts; prickly pear, pads; prickly pear, Texas, pads; rhubarb; udo; zuiki; including cultivars, varieties and/or hybrids of these commodities</p>		
Pests	Application Rate	
Anthracnose	<i>Colletotrichum</i> spp.[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Alternaria Leaf Spot	<i>Alternaria</i> spp.[*]	
Bacterial Crown Rot	<i>Erwinia chrysanthemi</i> [*]	
Botrytis Blight / Gray Mold	<i>Botrytis</i> spp.[*]	
Phytophthora Spear and Crown Rot	<i>Phytophthora</i> spp.[*]	
Powdery Mildew	<i>Leveillula taurica</i> [*]	
Ramularia Leaf Spot	<i>Ramularia cynarae</i> [*]	
Rust	<i>Puccinia asparagi</i> [*]	
Watery Soft Rot	<i>Sclerotinia</i> spp.[*]	

*Not for use in CA

Tropical and Subtropical Fruit, Edible Peel		
<p>Acai; acerola; achachairu; African plum; agritos; almondette; ambarella; apak palm; appleberry; araza; arbutus berry; babaco; bacaba palm; bacaba-de-leque; bayberry, red; bignay; bilimbi; borojo; breadnut; cabeluda; cajou, fruit; cambuca; carandas-plum; carob; cashew apple; Ceylon iron wood; Ceylon olive; cherry-of-the-Rio-Grande; Chinese olive, black; Chinese olive, white; chirauli-nut; ciruela verde; cocoplum; date; Davidson’s plum; desert-date; doum palm coconut; false sandalwood; feijoa; fig; fragrant manjack; gooseberry, Abyssinian; gooseberry, Ceylon; gooseberry, Indian; gooseberry, otaheite; governor’s plum; grumichama; guabiroba; guava; guava berry; guava, Brazilian; guava, cattley; guava, Costa Rican; guava, para; guava, purple strawberry; guava, strawberry; guava, yellow strawberry; guayabillo; illawarra plum; imbe; imbu; Indian-plum; jaboticaba; Jamaica-cherry; jambolan; jelly palm; jujube, Indian; kaffir-plum; kakadu plum; kapundung; karanda; kwai muk; lemon aspen; mangaba; Marian plum; mombin, Malayan; mombin, purple; mombin, yellow; monkeyfruit; monos plum; mountain cherry; nance; natal plum; noni; olive; papaya, mountain; pataua; peach palm, fruit; persimmon, black; persimmon, Japanese; pitomba; plum-of-Martinique; pomerac; rambai; rose apple; rukam; rumberry; sea grape; sentul; sete-capotes; silver aspen; starfruit; Surinam cherry; tamarind; uvalha; water apple; water pear; water berry; wax jambu; including cultivars, varieties and/or hybrids of these commodities</p>		
Pests	Application Rate	

Leaf Spot	<i>Cercospora cladosporioides</i> [*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Olive Knot	<i>Pseudomonas savastanoi</i> pv. <i>savastanoi</i> [*]	

*Not for use in CA

Tropical and Subtropical Fruit, Inedible Peel		
<p>Abiu; aisen; akee apple; atemoya; avocado; avocado, Guatemalan; avocado, Mexican; avocado, West Indian; bacury; bael fruit; banana; banana, dwarf; binjai; biriba; breadfruit; Burmese grape; canistel; cat's-eyes; champedak; cherimoya; cupuacu; custard apple; dragon fruit; durian; elephant-apple; etambe; granadilla; granadilla, giant; ilama; inga; jackfruit; jatoba; karuka; kei apple; langsung; lanjut; longan; lucuma; lychee; mabolo; madras-thorn; mammy-apple; manduro; mango; mango, horse; mango, Saipan; mangosteen; marang; marmaladebox; matisia; mesquite; mongongo, fruit; monkey-bread-tree; monstera; nicobar-breadfruit; paho; pandanus; papaya; passionflower, winged-stem; passionfruit; passionfruit, banana; passionfruit, purple; passionfruit, yellow; pawpaw, common; pawpaw, small-flower; pelipisan; pequi; pequia; persimmon, American; pineapple; pitahaya; pitaya; pitaya, amarillo; pitaya, roja; pitaya, yellow; plantain; pomegranate; poshte; prickly pear, fruit; prickly pear, Texas, fruit; pulasan; quandong; rambutan; saguaro; sapodilla; sapote, black; sapote, green; sapote, mamey; sapote, white; sataw; satinleaf; screw-pine; Sierra Leone-tamarind; soncoya; soursop; Spanish lime; star apple; sugar apple; sun sapote; tamarind-of-the-Indies; velvet tamarind; wampi; white star apple; wild loquat; including cultivars, varieties and/or hybrids of these commodities</p>		
Pests		Application Rate
Anthracnose	<i>Colletotrichum</i> spp.[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Bacterial Canker	<i>Xanthomonas</i> spp.[*]; <i>Erwinia</i> spp.[*]	
Bacterial Blight	<i>Pseudomonas</i> spp.[*]	
Botrytis Fruit Rot	<i>Botrytis</i> spp.[*]	
Heart Rot	<i>Alternaria</i> spp.[*]	
Leaf and Fruit Spots	<i>Cercospora</i> spp., <i>Gloeosporium</i> spp.[*]; <i>Pestalotia</i> spp.[*]	
Powdery Mildew	<i>Sphaerotheca pannosa</i> [*]	
Scab	<i>Sphaceloma</i> spp.[*]	
Sclerotinia	<i>Sclerotinia sclerotiorum</i> [*]	
Black Sigatoka	<i>Mycosphaerella fijiensis</i> [*]	

*Not for use in CA

Peanut	
Including those grown for oil production	
Pests	Application Rate

Early Leaf Spot	<i>Cercospora arachidicola</i> .*	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Late Leaf Spot	<i>Cercosporidium personatum</i> .*	
Rhizoctonia Limb Rot	<i>Rhizoctonia solani</i> .*	
Rust	<i>Puccinia arachidis</i> .*	
Sclerotinia blight	<i>Sclerotinia minor</i> , <i>S. sclerotiorum</i> .*	
Web Blotch	<i>Phoma arachidicola</i> .*	
Southern stem rot (southern blight)	<i>Sclerotium rolfsii</i> .*	

*Not for use in CA

Hemp		
Pests		Application Rate
Gray Mold / Bud Rot	<i>Botrytis cinerea</i> .*	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Powdery Mildew	<i>Podosphaera macularis</i> / <i>Sphaerotheca macularis</i> .*	
White Mold	<i>Sclerotinia sclerotiorum</i> .*	

*Not for use in CA

Hops		
Pests		Application Rate
Downy Mildew	<i>Pseudoperonospora humuli</i> .*	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Powdery Mildew	<i>Podosphaera macularis</i> / <i>Sphaerotheca macularis</i> .*	

*Not for use in CA

Coffee		
Pests		Application Rate
Anthracnose	<i>Colletotrichum</i> spp.*	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Bacterial Blight	<i>Pseudomonas syringae</i> .*	
Botrytis Flower Blight	<i>Botrytis</i> spp.*	
Cercospora Leaf Spot	<i>Cercospora</i> spp.*	

Coffee Berry Disease	<i>Colletotrichum coffeanum</i> [*]	
Coffee Rust	<i>Hemileia vastatrix</i> [*]	

*Not for use in CA

Sugarcane		
Pests		Application Rate
Gumming Disease	<i>Xanthomonas</i> spp.[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Red Rot	<i>Colletotrichum falcatum</i> [*]	
Rust	<i>Puccinia melanocephala</i> [*]	

*Not for use in CA

Tobacco		
Pests		Application Rate
Angular Leaf Spot	<i>Pseudomonas</i> spp.[*]	[1.5] [2] [2.5] [2.75] [3] [3.5] [2 – 3] lbs. per acre
Anthraxnose	<i>Colletotrichum and Glomerella</i> spp.[*]	
Blue Mold / Downy Mildew	<i>Peronospora tabacina</i> .[*]	
Brown Spot	<i>Alternaria</i> spp.[*]	
Frogeye Leaf Spot	<i>Cercospora nicotianae</i> [*]	
Collar Rot	<i>Sclerotinia sclerotiorum</i> [*]	
Gray Mold	<i>Botrytis cinerea</i> [*]	
Powdery Mildew	<i>Erysiphe cichoracearum</i> [*]	
Target Spot	<i>Rhizoctonia solani</i> [*]	

*Not for use in CA

Storage and Disposal

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Keep container tightly closed when not in use. This product consists of living microbes. Place container in a cool, dry place, but do not exceed 95°F (35°C). Do not freeze. Tightly close opened package.

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Handling: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration.

NOTICE TO USER

Seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on this label. To the extent consistent with applicable law, user assumes all risks of use, storage or handling not in accordance with accompanying directions.

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Zorda™ WG
BIOLOGICAL FUNGICIDE

[Alternative Brand Name: **Zorda™ WG Turf and Ornamentals**]

[Sub-Label I]

ACTIVE INGREDIENT:	By Wt
<i>Bacillus amyloliquefaciens</i> strain PTA-4838*	74.81%
OTHER INGREDIENTS:	<u>25.19%</u>
TOTAL:	100.00%

*Contains a minimum of 1.65×10^{10} colony forming units per gram [CFU/g] of product

KEEP OUT OF REACH OF CHILDREN

CAUTION

Net weight:

Lot No.:

EPA Reg. No.: 73049-522

EPA Est. No.: 33762-IA-01

Manufactured For:

Valent BioSciences LLC

1910 Innovation Way, Suite 100

Libertyville, IL 60048 USA

1-800-323-9597

FIRST AID	
If in Eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If Inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.
If on Skin or Clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
HOTLINE NUMBER	
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-315-9819 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-323-9597.</p>	

PRECAUTIONARY STATEMENTS

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION**

Causes moderate eye irritation. Harmful if inhaled. Avoid contact with eyes or clothing. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Protective eyewear
- Waterproof gloves
- Shoes plus socks

Mixers/loaders and applicators must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any R or P filter; or a NIOSH-approved elastomeric particulate respirator with any R or P filter; or a NIOSH-approved powered air-purifying respirator with an HE filter. Repeated exposures to high concentrations of microbial proteins can cause allergic sensitization.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

When handlers use closed systems in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.607(d)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT

When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

USER SAFETY RECOMMENDATIONS

Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

For terrestrial uses: Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry

interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval of 12 hours.

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water) is:

- Coveralls
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Keep unprotected persons out of the treatment areas until sprays have dried.

PRODUCT INFORMATION

Zorda™ WG Biological Fungicide (hereafter referred to as Zorda) contains a minimum of 1.65×10^{10} Colony Forming Units (CFUs) of the bacterium *Bacillus amyloliquefaciens* strain PTA-4838. When applied according to the label directions, Zorda [controls] [or] [suppresses] a broad range of fungal [and bacterial] pathogens to provide protection from harmful diseases.

As a microbial product containing live spores of the protective bacterium *Bacillus amyloliquefaciens* strain PTA-4838, Zorda will produce the best results when applied preventively (before a disease outbreak occurs).

Zorda can be applied as a foliar spray, either standalone or in combination with other registered products in a rotation or as tank mixes. For improved performance, use as part of a spray program in rotation with other registered fungicides [and bactericides] with unrelated modes of action.

Incorporation of adjuvants, in particular sticker / spreaders, to ensure improved coverage, can further enhance disease control. All types of spray equipment commonly utilized for the application of foliar sprays can be used to apply Zorda.

Many factors, including disease pressure, the environment (weather) and the condition of the crop can impact the level of control. Adjust use spray intervals and use rate accordingly, with higher rates and more frequent applications if high disease pressure is expected.

Re-application may be required in case of heavy rain events shortly after a treatment.

Product should be used as soon as possible after opening the package.

FOLIAR APPLICATION DIRECTIONS

Always read and follow the label instructions regarding application rates and restrictions. For best disease control performance, apply Zorda preventively (before or during the initial stages of disease). [Apply the higher labeled rates when increased pest pressure is expected based on predicted weather conditions or other factors].

Application equipment must be clean and free of previous pesticide deposits before applying Zorda. Determine the required amount of product based on desired application date and acreage to be treated. Fill tank with water to at least half the final volume. Add product(s) in mix order referenced in MIXING ORDER FOR TANK-MIX PARTNERS BY FORMULATION TYPE section (see below) to the spray tank and mix if necessary, for complete dissolution. Add remaining water to reach the desired spray volume (10 – 100 gallons per acre of prepared spray solution). If prepared spray solution is stored for extended periods of time, agitate well before use.

Always use spray volumes high enough to ensure thorough coverage of all treated plant surfaces. Complete coverage is crucial for efficient disease control or suppression.

GREENHOUSE APPLICATION DIRECTIONS

Zorda can be used as a foliar spray in the greenhouse. Please refer to the “Foliar Applications Directions” above for more information. As crop safety has not been confirmed on all cultivars, plant compatibility testing is recommended when spraying on a new cultivar in the greenhouse for the first time.

COMPATIBILITY WITH OTHER AGRICULTURAL PRODUCTS

Do not tank mix Zorda with other products unless compatibility has been verified. If considering tank mixing Zorda with other products, use the following compatibility jar test before mixing an entire tank: Add water from the same water source to a clear glass or plastic jar. Add the products in correct proportions. Mix thoroughly and let stand for a minimum of 15 minutes. Separation, gelling, or generation of heat are all signs of incompatibility.

Consult with your Valent Agricultural Specialist for potential pesticide interactions.

Always read and follow all label directions and precautions for each product. When using combinations of products, the most restrictive label limitations and precautions must be followed. Do not mix Zorda with any product that has a prohibition against tank mixing. For further information, consult your Valent Agricultural Specialist.

MIXING ORDER FOR TANK-MIX PARTNERS BY FORMULATION TYPE

- 1) Carrier (water)
- 2) Wettable granules (dry flowables)
- 3) Wettable powders
- 4) Aqueous solutions
- 5) Emulsifiable concentrates
- 6) Adjuvants

CROP APPLICATION DIRECTIONS

Optional Applications for Ornamentals and Woody ornamentals and Turfgrass and other grasses.

Ornamentals and Woody Ornamentals		
Ornamentals such as flowering plants, annual plants and bedding plants, potted and cut flowers, topical foliage		
Woody ornamentals such as broadleaves – shrubs and trees, conifers – shrubs and trees		
Pests		Application Rate
Anthracnose	<i>Colletotrichum</i> spp.[*]	<p style="text-align: center;">Outdoor uses: [1.5] [2] [2.5] [2.75] [3] [3.5] [1.5 – 3] lbs. per acre</p> <p>Greenhouse Use: Low to medium disease pressure: 0.6 oz./gal (4.5 g/L)</p> <p>High disease pressure: 1.2 oz./gal (9.0 g/L)</p>
Bacterial Diseases	<i>Erwinia</i> spp.; <i>Pseudomonas</i> spp.[*]; <i>Xanthomonas</i> spp.[*]	
Black Spot of Rose	<i>Diplocarpon rosae</i> [*]	
Blossom Blight	<i>Monilinia</i> spp.[*]	
Downy Mildew	<i>Peronospora</i> spp.[*]; <i>Plasmopara viburni</i> [*]	
Gray Mold	<i>Botrytis</i> spp.[*]	
Leaf Spot	<i>Alternaria</i> spp.[*]; <i>Cercospora</i> spp.[*]; <i>Entomosporium</i> spp.[*]; <i>Myrothecium</i> spp.[*]; <i>Septoria</i> spp.[*]	
Powdery Mildew	<i>Erysiphe</i> spp.[*]; <i>Microsphaera</i> spp.[*]; <i>Oidium</i> spp.[*]; <i>Podosphaera</i> spp.[*]; <i>Sphaerotheca</i> spp.[*];	
Rust	<i>Puccinia</i> spp.[*]	
Scab	<i>Venturia</i> spp.[*]	

*Not for use in CA

Turfgrass and Ornamental Grasses		
Bluegrass; Bentgrass; Bermudagrass; Dichondra; Fescue; Orchardgrass; <i>Poa annua</i> ; Ryegrass; St. Augustine; Zoysia; mixtures and other grasses, ornamental turf		
Pests		Application Rate
Anthracnose	<i>Colletotrichum graminicola</i> [*]	<p style="text-align: center;">[1.5] [2] [2.5] [2.75] [3] [3.5] [1.5 – 3] lbs. per acre</p>
Dead Spot	<i>Ophiosphaerella agrostis</i> [*]	
Brown Patch	<i>Rhizoctonia solani</i> [*]	
Copper Spot	<i>Gloeocercospora sorghi</i> [*]	
Dollar Spot	<i>Lanzia</i> spp.[*]; <i>Clariireedia homoeocarpa</i> / <i>Sclerotinia homeocarpa</i> [*]	
Fusarium Patch	<i>Fusarium nivale</i> [*]	
Gray Leaf Spot	<i>Pyricularia grisea</i> [*]	

Gray Snow Mold	<i>Typhula</i> spp.[*]
Melting Out Leaf Spot	<i>Bipolaris</i> spp.[*]; <i>Drechslera</i> spp.[*]
Necrotic Ring Spot	<i>Leptosphaeria korrae</i> [*]
Pink Patch	<i>Limonomyces roseipellis</i> [*]
Pink Snow Mold	<i>Microdochium nivale</i> [*]
Powdery Mildew	<i>Erysiphe graminis</i> [*]
Pythium Blight / Root Rot	<i>Pythium</i> spp.[*]
Red Thread	<i>Laetisaria fuciformis</i> [*]
Rust	<i>Puccinia</i> spp.[*]
Southern Blight	<i>Sclerotium rolfsii</i> [*]
Spring Dead Spot	<i>Leptosphaeria korrae</i> [*]; <i>Leptosphaeria narmari</i> [*]; <i>Ophiosphaerella herpotricha</i> [*]
Stripe Smut	<i>Ustilago striiformis</i> [*]; <i>Urocystis agropyri</i> [*]
Summer Patch / Poa Patch	<i>Magnaporthe poae</i> [*]
Take-all Root Rot	<i>Gaeumannomyces graminis</i> [*]
Yellow Patch	<i>Rhizoctonia cerealis</i> [*]
Yellow Tuft / Downy Mildew	<i>Sclerophthora macrospora</i> [*]

*Not for use in CA

Storage and Disposal

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Keep container tightly closed when not in use. This product consists of living microbes. Place in a cool, dry place, do not exceed 95°F (35°C). Do not freeze. Tightly close opened package.

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Handling: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration.

NOTICE TO USER

Seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on this label. To the extent consistent with applicable law, user assumes all risks of use, storage or handling not in accordance with accompanying directions.

